

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method of preparing a supported catalyst from a liquid catalyst, the method comprising:
dispersing the liquid catalyst in a non-reactive liquid, the non-reactive liquid being at a sufficiently low temperature to freeze the liquid catalyst to form a frozen catalyst;
dispersing a solid carrier in the non-reactive liquid wherein the frozen catalyst contacts the solid carrier; and
removing the non-reactive liquid.
2. (Original) The method of claim 1 wherein the non-reactive liquid is liquified nitrogen gas, liquified argon gas, or liquified helium gas.
3. (Original) The method of claim 1 wherein the step of removing the non-reactive liquid is performed by evaporation of the non-reactive liquid.
4. (Original) The method of claim 1 wherein the solid carrier is an inorganic oxide, inorganic silicate, inorganic chloride or organic polymer resin.
5. (Original) The method of claim 4 wherein the solid carrier is an inorganic oxide selected from the group consisting of silica, alumina, silica-alumina, magnesia, titania and zirconia.
6. (Original) The method of claim 4 wherein the solid carrier is silica.
7. (Original) The method of claim 4 wherein the inorganic oxide has a surface area from 10 to 700 m² /g, a pore volume from 0.1 to 4 ml/g, average particle size from 10 to 500 nm, and a pore diameter from 10 to 1000 .

8. (Currently Amended) The method of claim 4 wherein the inorganic oxide is pre-treated to remove all or a portion of hydroxyl ~~functionality~~ functional groups present on the surface of the solid carrier.

9. (Original) The method of claim 8 wherein the pretreatment is accomplished by thermal treatment, chemical treatment, or a combination thereof.

10. (Original) The method of claim 1 wherein the supported catalyst contains from 0.001 to 0.5 mmole transition metal per gram of solid carrier.

11. (Original) The method of claim 1 wherein the liquid catalyst comprises a group 3 to group 10 transition metal complex or an organometallic compound.

12. (Currently Amended) The method of claim 1 wherein the liquid catalyst comprises a component selected from the group consisting of a Ziegler-Natta catalyst, a ~~chromium based catalyst~~ a catalyst comprising chromium, a ~~vanadium based catalyst~~ a catalyst comprising vanadium, a single site metallocene catalyst, a cationic metal halide catalyst, a ~~cobalt based catalyst~~ a catalyst comprising cobalt, and a ~~nickel based catalyst~~ a catalyst comprising nickel.

13. (Original) The method of claim 12 wherein the liquid catalyst further comprises an activator.

14. (Original) The method of claim 13 wherein the activator is selected from the group consisting of alumoxanes; alkylaluminum compounds; alkyl aluminum halides; alkyl aluminum hydrides; alkylsilyl halides; alkylidisilazanes; alkyl and aryl alkoxysilanes; alkyl, aryl, and alkoxy boron compounds; and mixture thereof.

15. (Original) A method of preparing a supported catalyst from a liquid catalyst, the method comprising:

dispersing the liquid catalyst in liquid nitrogen, the liquid nitrogen being at a sufficiently low temperature to freeze the liquid catalyst and form a frozen catalyst;

dispersing a solid carrier in the liquid nitrogen wherein the frozen catalyst contacts the solid carrier; and

removing the liquid nitrogen.

16. (Original) The method of claim 15 wherein the step of removing the liquid nitrogen is performed by evaporation of the liquid nitrogen.

17. (Original) The method of claim 15 wherein the solid carrier is an inorganic oxide, inorganic silicate, inorganic chloride or organic polymer resin.

18. (Original) The method of claim 17 wherein the solid carrier is an inorganic oxide selected from the group consisting of silica, alumina, silica-alumina, magnesia, titania and zirconia.

19. (Original) The method of claim 15 wherein the liquid catalyst comprises a complex of a group 3 to group 10 element of the Periodic Table or an organometallic compound.

20. (Currently Amended) The method of claim 15 wherein the liquid catalyst comprises a component selected from the group consisting of a Ziegler-Natta catalyst, ~~a chromium-based catalyst~~ a catalyst comprising chromium, ~~a vanadium-based catalyst~~ a catalyst comprising vanadium, a single site metallocene catalyst, a cationic metal halide catalyst, ~~a cobalt-based catalyst~~ a catalyst comprising cobalt, and ~~a nickel-based catalyst~~ a catalyst comprising nickel.

21. (Original) The method of claim 20 wherein the liquid catalyst further comprises an activator.

22. (Original) The method of claim 21 wherein the activator is selected from the group consisting of alumoxanes; alkylaluminum compounds; alkyl aluminum halides; alkyl aluminum hydrides; alkylsilyl halides; alkyldisilazanes; alkyl and aryl alkoxysilanes; alkyl, aryl, and alkoxy boron compounds, and mixture thereof.

23. (Original) A supported catalyst made by the method comprising:
dispersing a liquid catalyst in a non-reactive liquid, the non-reacting liquid being at a sufficiently low temperature to freeze the liquid catalyst and form a frozen catalyst;
dispersing a solid carrier in the non-reactive liquid wherein the frozen catalyst contacts the solid carrier; and
removing the non-reactive liquid.

24. (Original) The supported catalyst of claim 23 wherein the non-reactive liquid is liquified nitrogen gas, liquified argon gas, or liquified helium gas.